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10/805,797	03/22/2004	Christopher J. Stone	BCS03190	1071

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EXAMINER	
TAYLOR, JOSHUA D	

ART UNIT	PAPER NUMBER
4157	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/805,797	STONE, CHRISTOPHER J.	
	Examiner	Art Unit	
	JOSHUA TAYLOR	4157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

999DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 9, and 16-21 rejected under U.S.C. 102(e) as being anticipated by Yamamoto et al. (Pub. No.: US 2005/0228897).

As per claim 1, Yamamoto discloses,

A method (300) for providing conditional access to data (12/52) within a broadband communication system (10) , the broadband communication system (10) having a conditional access system (24) responsive to a plurality of subscriber devices (14, 20) (see figure 1, paragraph [0031])**, the data (52) stored on a recording medium (50) when the recording medium (50) is detachably coupled to a first subscriber device (14) and encrypted using an encryption key (54) associated with the first subscriber device** (paragraph [0033])**, the method comprising:**

based on a request on behalf of a second subscriber device (20) for access to the data (52), arranging (302) for the conditional access system (24) to authenticate the second subscriber device (20) (paragraph [0043])**; and**

after authentication of the second subscriber device (20), arranging (304) for the conditional access system (24) to transfer the encryption key (54) to the second subscriber device (24) (paragraph [0035], lines 12-17)**,**

the encryption key (54) usable by the second subscriber device (20) to decrypt the data (52) when the recording medium (50) is detachably coupled to the second subscriber device (20), access to the decrypted data by the second subscriber device (20) restricted in a manner specified by the conditional access system (24) (paragraph [0035], lines 17-21)**.**

As per claim 9, Yamamoto discloses,

The method according to claim 1, wherein the step of arranging for authentication of the second subscriber device (20) comprises arranging for the conditional access system (24) to receive a predetermined identifier from the second subscriber device (20) (paragraph [0043], lines 2-4, "The authenticating unit 106 performs mutual machine authentication with the mobile phone 400, via the communicating unit," where mutual machine authentication is known to mean a method of providing validation of a user via a specific machine identifier).

As per claim 16, Yamamoto discloses,

A computer-readable medium (30, 264) encoded with a computer program (34, 222) which, when loaded into a processor (32, 239), implements the method of claim 1. This claim is rejected on the same grounds as claim 1, as it performs the method of claim 1.

As per claim 17, Yamamoto discloses,

The computer-readable medium (30) according to claim 16, wherein the processor (32) is associated with the conditional access system (24). In paragraph [0046], Yamamoto discusses the controlling unit, which could also be called a conditional access unit. The controlling unit inherently has a processor, as it performs such functions as reading an encryption key, and thus it could be expected to perform the method of claim 1.

As per claim 18, Yamamoto discloses,

The computer-readable medium (264) according to claim 16, wherein the processor (239) is associated with the first subscriber device (14). In paragraph [0033], Yamamoto discloses that the home server apparatus, i.e. the first subscriber device, can decrypt and decode data, which implies that is has a processor, and thus it could be expected to perform the method of claim 1.

As per claim 19, Yamamoto discloses,

The computer-readable medium according to claim 16, wherein the processor is associated with the second subscriber device (20). In paragraph [0035],

Yamamoto discloses that the mobile phone, i.e. the second subscriber device, can decrypt and decode data, which implies that is has a processor, and thus it could be expected to perform the method of claim 1.

As per claim 20, Yamamoto discloses,

An apparatus for providing conditional access to data (12/52) within a broadband communication system (10), the broadband communication system (10) having a conditional access system (24) responsive to a plurality of subscriber devices (14, 20) (see figure 1, paragraph [0031]), **the data (52) stored on a recording medium (50) when the recording medium (50) is detachably coupled to a first subscriber device (14), and encrypted using an encryption key (54) associated with the first subscriber device (14)** (paragraph [0033]), **the apparatus comprising: a computer-readable storage medium (30, 264); and a processor (32, 239) responsive to the computer-readable storage medium (30, 264) and to a computer program (34, 222), the computer program (34, 222), when loaded into the processor (32, 239), operative to: based on a request on behalf of a second subscriber device (20) for access to the data (52), arrange for the conditional access system (24) to authenticate the second subscriber device (20)** (paragraph [0043]); **and arrange for the conditional access system (24) to transfer the encryption key (54) to the second subscriber device (20) after authentication of the second subscriber device (20)** (paragraph [0035], lines 12-17), **the encryption key (54) usable by the second subscriber device (20) to decrypt the data when the recording medium (50) is**

detachably coupled to the second subscriber device (20) (paragraph [0035], lines 17-21).

As per claim 21, Yamamoto discloses,

A system for providing conditional access to data (12/52) within a broadband communication network (10), the data (52) stored on a recording medium (50) detachably couplable to a plurality of subscriber devices (14, 20) (see figure 1, paragraph [0031]), **and encrypted using an encryption key (54) associated with a first subscriber device (14)** (paragraph [0033]), **the system comprising:**
a network communications interface (42, 259) for forwarding a request for access to the data by a second subscriber device (20) (paragraph [0035], lines 1-4, figure 1); **and an information processing system (44, 253) in communication with the network communications interface (42, 259), for receiving and processing the request forwarded by the network communications interface (42, 259), and, based on the request, performing a method comprising:**
arranging for authentication of the second subscriber device (20) by a conditional access system (24) within the broadband communication network (10) (paragraph [0043], lines 1-6); **and after authentication of the second subscriber device (20), arranging for the conditional access system (24) to transfer the encryption key (54) to the second subscriber device (20), the encryption key (54) usable by the second subscriber device (20) to decrypt the data when the recording medium (50) is detachably coupled to the second subscriber device (20)** (paragraph [0046]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-4, 22-23 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (Pub. No.: US 2005/0228897) in view of Robertson et al. (Pub. No.: US 2004/0068747).

Regarding claim 2; **The method according to claim 1, wherein the broadband communication system comprises (10) a cable television system.** Yamamoto et al. do not disclose using their invention in a cable television system. However, Robertson et al. disclose the transfer of data between a main set-top terminal (STT) and remote devices in a cable television environment (paragraph [0020]). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to provide conditional access to the information being passed between the STT and the remote devices. Keeping unauthorized users from accessing data would have been a highly desirable feature in the area of multiple-user home networks, as Yamamoto shows it to be in the field of his content distribution system.

Regarding claim 3; **The method according to claim 2, wherein the cable television system is an interactive two-way system.** This claim is rejected under the same reasons as claim 2. The only difference between this claim and claim 2 is the addition of the phrase "interactive two-way system." However, Fig. 1 of Robertson et al. clearly shows that the cable television system being discussed can be a two-way system, as indicated by the bi-directional arrows between the headend and the communications network, as well as between the communications network and the local network

Regarding claim 4; **The method according to claim 2, wherein the cable television system is a one-way system.** This claim is rejected under the same reasons as claim 3. A one-way system is also implied in the drawing of Fig. 1, as a two-way cable television system is inherently capable of performing the functions of a one-way system.

Regarding claim 22; **The system according to claim 21, wherein the system comprises a headend (22) of a cable television system.** Yamamoto discloses the claims of claim 21, but does not disclose that the system comprises a headend of a cable television system. Robertson, however, discloses in paragraph [0022] that **"The headend 110 may include one or more server devices for providing video, audio, and/or data signals to the STT** [set-top terminal] **105 via the CN** [control network] **130. The headend 110 and the STT 105 cooperate to provide a user with a variety of services."** Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have the system of claim 21 comprising a headend.

When using this application in a cable television environment, as was shown in the rejection of claim 2, it would be highly desirable to take advantage of the benefit of using the cable headend to perform some of the tasks of the system of claim 21, as it would reduce the complexity, and thereby the cost, of the individual subscriber devices.

Regarding claim 23; **The system according to claim 21, wherein the system comprises the second subscriber device (20), and wherein the second subscriber device comprises a cable set-top box.** Yamamoto discloses the claims of claim 21, but does not disclose that the system comprises a cable set-top box. Robertson, however, discloses the user of a cable set-top box as part of **"a receiver network (i.e., a networked multimedia system)."**

Claims 5-7 and 10-14 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (Pub. No.: US 2005/0228897) in view of Reisman (Pub. No.: US 2004/0031058).

Regarding claim 5; **The method according to claim 2, wherein the first (14) and second (20) subscriber devices comprise set-top boxes.** Yamamoto does not disclose having two set-top boxes as the subscriber devices. However, Reisman does, stating that **"In cases of multiple STBs in a household, such as in multiple rooms, or of advanced STBs that support multiple TV sets, including STBs with gateway functions, such relay associations could be specific to any selected TV set, and**

similarly, multiple such relay processes could be concurrently supported with any of multiple PCs, perhaps used for multiple TVs and/or for multiple viewers of a single TV (paragraph [0302], lines 9-16)**."** Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the secure data transfer method of Yamamoto in the case of Reisman, so as to prevent unauthorized users from viewing the data.

Regarding claim 6; **The method according to claim 5, wherein the recording medium (50) is detachably couplable to the first (14) and second (20) subscriber devices via a serial bus implementation, at least in part in compliance with the Institute of Electrical and Electronics Engineers 1394 standard.** The combination of Yamamoto and Reisman fails to teach this claim, but the examiner takes Official Notice that the use of a 1394 interface, such as Apple Inc's FireWire, is notoriously well known in the art, as it is a serial bus interface standard. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use this serial bus implementation to detachably couple the devices.

Regarding claim 7; **The method according to claim 6, wherein the recording medium (50) comprises an external personal video recorder.** Yamamoto does not disclose the use of an external personal video recorder. However, Reisman does, stating that **" "Local servers" include analogous services that may be local to the user, including media servers, gateways, controllers, PCs, hubs, storage servers, storage area networks, DVRs (also referred to a PVRs)** (paragraph [0048], lines 25-28)**."**

Therefore, it would have been obvious to one skilled in the art at the time of the invention to use a PVR as a recording medium, as they are a well known device for this application. Use of a PVR would have been a highly desirable feature, as it is a convenient way to store data after it has been transferred to the user's location.

Regarding claim 10; **The method according to claim 1, wherein the data (52) is protected by intellectual property rights of a third party.** Yamamoto discloses the method of claim 1, but does not explicitly disclose that the data would be protected by intellectual property rights of a third party. However, Reisman discloses that the data could be protected by the intellectual property rights of a third party in paragraph [0529], lines 7-10, saying **"that the use of a resource as the starting resource for a third party link involved a kind of intellectual property right belonging the rights holder for that resource."** Yamamoto discloses that there can be intellectual property right involved, in paragraph [0238], where he states **"all the contents are encrypted before being transmitted, in view of protection of the copyright."** So, it would be desirable for this to include the case where the copyright was held by a third party, (which is implied by Yamamoto, but explicitly stated by Reisman) so as to account for more diverse and inclusive data, which would give the viewer more options.

Regarding claim 11; **The method according to claim 10, further comprising: specifying an access condition associated with the data, the access condition based on the predetermined intellectual property rights.** The method of claim 10 is taught by the combination of Yamamoto and Reisman, and further, in Reisman, paragraph

[0529], it states, **"In such case, the use of this method to provide digital rights management in the form of conditional control of entitlements to display or activate third party links to such content could be beneficial in allowing rights holders and others to ensure that uses of such resources in conjunction with third party links were only permitted in accord with suitable business terms, such as payment of fees."** By "suitable business terms," Reisman is referring to an access condition associated with the data, the access condition based on the predetermined intellectual property rights. It would have been obvious to one skilled in the art at the time of the invention to specify an access condition that was associated with the data in the method of claim 10. Specifying an access condition based on the predetermined intellectual property rights would have been a highly desirable feature in the art, as it would be necessary to ensure that no part of the intellectual property rights were being violated.

Regarding claim 12; **The method according to claim 11, wherein the access condition is specified by the conditional access controller (24).** The method of claim 11 is taught by the combination of Yamamoto and Reisman, and further, in paragraph [0046], Yamamoto discusses the controlling unit, which could also be called a conditional access controller. The controlling unit inherently has a processor, as it performs such functions as reading an encryption key, and thus it could be expected to specify the access condition if so programmed.

Regarding claim 13; **The method according to claim 12, wherein the step of arranging for authentication of the second subscriber device (20) comprises evaluating the access condition.** The method of claim 12 is taught by the combination of Yamamoto and Reisman, and further, in Reisman, paragraph [0529], it states, **"In such case, the use of this method to provide digital rights management in the form of conditional control of entitlements to display or activate third party links to such content could be beneficial in allowing rights holders and others to ensure that uses of such resources in conjunction with third party links were only permitted in accord with suitable business terms, such as payment of fees."** By "suitable business terms," Reisman is referring to an access condition associated with the data, the access condition based on the predetermined intellectual property rights. It would have been obvious to one skilled in the art at the time of the invention to evaluate an access condition that was associated with the data in the method of claim 10. Evaluating an access condition based on the predetermined intellectual property rights would have been a highly desirable feature in the art, as it would be necessary to ensure that no part of the intellectual property rights were being violated.

Regarding claim 14; **The method according to claim 13, wherein the use of the data (52) by the second subscriber device (20) is restricted in a manner specified by the access condition.** The method of claim 13 is taught by the combination of Yamamoto and Reisman, and further, in Reisman, paragraph [0529], it states, **"In such case, the use of this method to provide digital rights management in the form of conditional**

control of entitlements to display or activate third party links to such content could be beneficial in allowing rights holders and others to ensure that uses of such resources in conjunction with third party links were only permitted in accord with suitable business terms, such as payment of fees." By "suitable business terms," Reisman is referring to an access condition associated with the data, the access condition based on the predetermined intellectual property rights. It would have been obvious to one skilled in the art at the time of the invention to restrict the use of the data in a manner specified by the access condition. Restricting the use of the data in a manner specified by the access condition would have been a highly desirable feature in the art, as it would be necessary to ensure that no part of the intellectual property rights were being violated.

Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (Pub. No.: US 2005/0228897) in view of Clancy (Pub. No.: US 2004/0107443).

Regarding claim 8; **The method according to claim 1, further comprising: prior to arranging for transfer of the encryption key (54) to the second subscriber device (20), arranging for payment of a fee by the second subscriber device (20).** Yamamoto discloses the method of claim 1, however, Yamamoto does not disclose arranging for the payment of a fee by the second subscriber device. Clancy discloses **"a method for ordering a PPV** (pay-per-view) **program by proxy. The method**

includes sending a program request from a first set top box (STB) to a head end unit requesting a program on behalf of a second STB receiving the program request in the head end unit where the head end determines whether the first STB is authorized to make the program request for the second STB, and if the first STB is authorized to make the program request for the second STB enabling the second STB to play the requested program (paragraph [0010])**."** Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to arrange for a payment by the second subscriber device prior to arranging for the transfer of the encryption key. This feature would have been highly desirable in the system of claim 1, as it would allow for the service provider to make sure that fees for certain content were received before the content was allowed to be viewed.

Claim 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (Pub. No.: US 2005/0228897) in view of Rodgers et al. (Pub. No.: US 2005/0071639).

Regarding claim 15; **The method according to claim 1, wherein the encryption key (54) is created by one of the conditional access controller (24) and the first subscriber device (14).** Yamamoto discloses the method of claim 1, however, he does not disclose wherein the encryption key is created by one of the conditional access controller and the first subscriber device. Rodgers et al. disclose that the first subscriber device can create the encryption key in paragraph [0011], lines 1-8, **"In one embodiment, the method of verifying the authenticity of a set-top-box chip involves receiving a verification sequence from a head-end verification device, generating an**

encryption key, decrypting the verification sequence using the encryption key to generate a first hashed data sequence, generating a second hashed data sequence, and determining if the first hashed data sequence is equal to the second hashed data sequence." Also, in Fig. 1, Rodgers et al. show "Key Generation Circuitry" in the "Set-Top-Box Chip." Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the encryption key created by one of the conditional access controller and the first subscription device, as this would be a highly desirable feature due to the fact that it allows for a secure method for the generation of the encryption key.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA TAYLOR whose telephone number is (571)270-3755. The examiner can normally be reached on 8am-5pm, M-F, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571) 272-7332. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Josh Taylor/

/ABUL K. AZAD/

Primary Examiner, Art Unit 2626